

What is Claimed is:

1. A TFT LCD(thin film transistor liquid crystal display) comprising:

a first substrate and a second substrate;

a scanning line on the first substrate;

a signal line formed to cross the scanning line;

a channel layer formed along the signal line and extended to a portion of the scanning line;

source and drain electrodes formed separated on the channel layer over the scanning line;

a pixel electrode connected to the drain electrode; and,

a liquid crystal layer formed between the first substrate and the second substrate.

2. A TFT LCD as claimed in claim 1, wherein the drain electrode is parallel to the signal line.

3. A TFT LCD as claimed in claim 1, wherein the channel layer has a width smaller than a width of the signal line and the scanning line.

4. A TFT LCD as claimed in claim 1, further comprising a gate insulating layer between the scanning line and the channel layer.

5. A TFT LCD as claimed in claim 1, further comprising an ohmic contact layer between the source and drain electrodes and the channel layer.

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6. A TFT LCD as claimed in claim 1, wherein the source electrode and the signal line are formed as a unit.

7. A TFT LCD as claimed in claim 1, wherein the drain electrode is overlapped with the scanning line.

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8. A TFT LCD comprising:

a first substrate and a second substrate;

a plurality of scanning lines on the first substrate;

a gate insulating layer on an entire surface inclusive of the scanning line;

a channel layer on the gate insulating layer to cross the scanning lines having a portion  
each of  
6 extended to a top of the scanning lines;

source and drain electrodes formed separated on the channel layer over the scanning line;

a signal line formed as a unit with the source electrode along the channel layer which is  
each of  
9 formed to cross the scanning lines;

a protection film formed on an entire surface inclusive of the signal line;

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a pixel electrode connected to the drain electrode on the protection film; and,

a liquid crystal layer formed between the first substrate and the second substrate.

9. A TFT LCD as claimed in claim 8, wherein the drain electrode is parallel to the signal line.

10. A TFT LCD as claimed in claim 8, wherein the drain electrode crosses the scanning

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line

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11. A TFT LCD as claimed in claim 8, wherein the channel layer has a width smaller than a width of the signal line and the scanning line.

5 12. A TFT LCD as claimed in claim 8, further comprising an ohmic contact layer between the source and drain electrodes and the channel layer.

fig. 3  
13. A TFT LCD as claimed in claim 8, wherein the scanning line has a portion enlarged in the vicinity of the signal line.

14. A TFT LCD as claimed in claim 13, wherein the channel layer is formed along the signal line over the scanning line, and has a width enlarged as much as a width of the scanning line is enlarged.

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15. A TFT LCD having a first substrate, a second substrate, and liquid crystal sealed between the first and second substrates, comprising:

figs. 2A, 2B  
a scanning line on the first substrate;

a gate insulating layer on the scanning line;

15 a channel layer on the gate insulating layer;

a signal line formed to cross the scanning line to cover a portion of the channel layer;

a drain electrode formed on the channel layer spaced a distance away from the signal line in parallel to the signal line;

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a protection film formed on an entire surface of the first substrate inclusive of the drain electrode; and  
a pixel electrode formed on the protection film connected to the drain electrode.

5 16. A TFT LCD as claimed in claim 15, wherein the channel layer is formed along the signal line.

17. A TFT LCD as claimed in claim 16, wherein the channel layer has a width smaller than a width of the signal line and the scanning line.

18. A TFT LCD as claimed in claim 15, wherein the signal line serves as a source electrode disposed opposite to the drain electrode.

19. A TFT LCD as claimed in claim 15, further comprising a gate insulating layer between the scanning line and the channel layer.

20. A TFT LCD as claimed in claim 18, further comprising an ohmic contact layer between the source and drain electrodes and the channel layer.

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